

SEQUENCE LISTING

<110> BIOVECTOR THERAPEUTICS
INSERM

<120> POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
PARTICULARLY IN VACCINATION

<130> WOB EPIT 2

$$\begin{aligned} &\langle 140 \rangle \\ &\langle 141 \rangle \end{aligned}$$

<150> FR 9907012
<151> 1999-06-03

<160> 18

<170> PatentIn Ver. 2.1

<210>	1
<211>	477
<212>	ADN

<213> Human Papillomavirus

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<220>
<221> CDS
<222> (1) .. (477)
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atg cac caa aag aga act gca atg ttt cag gac cca cag gag cga ccc 48
Met His Gln Lys Arg Thr Ala Met Phe Gln Asp Pro Gln Glu Arg Pro
1 5 10 15

aga aag tta cca cag tta tgc aca gag ctg caa aca act ata cat gat 96
Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Gln Thr Thr Ile His Asp
20 25 30

ata ata tta gaa tgt gtg tac tgc aag caa cag tta ctg cga cgt gag 144
Ile Ile Leu Glu Cys Val Tyr Cys Lys Gln Gln Leu Leu Arg Arg Glu
35 40 45

gta tat gac ttt gct ttt cgg gat tta tgc ata gta tat aga gat ggg 192
Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr Arg Asp Gly
50 55 60

aat cca tat gct gta tgt gat aaa tgt tta aag ttt tat tct aaa att 240
Asn Pro Tyr Ala Val Cys Asp Lys Cys Leu Lys Phe Tyr Ser Lys Ile
65 70 75 80

agt gag tat aga cat tat tgt tat agt ttg tat gga aca aca tta gaa 288
 Ser Glu Tyr Arg His Tyr Cys Tyr Ser Leu Tyr Gly Thr Thr Leu Glu
 85 90 95

cag caa tac aac aaa ccg ttg tgt gat ttg tta att agg tgt att aac 336
Gln Gln Tyr Asn Lys Pro Leu Cys Asp Leu Leu Ile Arg Cys Ile Asn
100 105 110

of the sequence coding for E6 of HPV and corresponding peptide sequence

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5      <220>
      <221> CDS
      <222> (1)..(90)

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cga ccc aga aag tta cca cag tta tgc aca gag ctg caa aca act ata 48
10 Arg Pro Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Gln Thr Thr Ile
    1          5          10          15

      cat gat ata ata tta gaa tgt gtg tac tgc aag caa cag tta 90
15 His Asp Ile Ile Leu Glu Cys Val Tyr Cys Lys Gln Gln Leu
    20          25          30

      <210> 4
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20    <212> PRT
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      <223> Description of the artificial sequence: fragment
            of the sequence coding for E6 of HPV and corresponding
            peptide sequence
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Arg Pro Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Gln Thr Thr Ile
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30 His Asp Ile Ile Leu Glu Cys Val Tyr Cys Lys Gln Gln Leu
    20          25          30

      <210> 5
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40    <223> Description of the artificial sequence: fragment
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      <400> 5
cga cgt gag gta tat gac ttt gct ttt cgg gat tta tgc ata gta tat 48
50 Arg Arg Glu Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr
    1          5          10          15

      aga gat ggg aat cca tat 66
55 Arg Asp Gly Asn Pro Tyr
    20

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<213> Artificial sequence

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10

15

20 <213> Artificial sequence

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30

7

35

45

50

55

<211> 66

6

35

40

45

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aga gcc cat tac aat att gta acc ttt tgt tgc aag tgt gac tct acg    192
Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys Lys Cys Asp Ser Thr
      50                      55                      60

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ctt cgg ttg tgc gta caa agc aca cac gta gac att cgt act ttg gaa 240
Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg Thr Leu Glu
65 70 75 80

gac ctg tta atg ggc aca cta gga att gtg tgc ccc atc tgt tct cag 288
Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser Gln
85 90 95

aaa cca taa 297
Lys Pro

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<210> 12
<211> 98
<212> PRT
<213> Human Papillomavirus
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<400> 12
Met His Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln
1 5 10 15

Pro Glu Thr Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn Asp Ser Ser
20 25 30

Glu Glu Glu Asp Glu Ile Asp Gly Pro Ala Gly Gln Ala Glu Pro Asp
35 40 45

Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys Lys Cys Asp Ser Thr
50 55 60

Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg Thr Leu Glu
65 70 75 80

Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser Gln
85 90 95

Lys Pro

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<210> 13
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<222> (1) .. (69)
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<400> 13

gga gat aca cct aca ttg cat gaa tat atg tta gat ttg caa cca gag 48

Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln Pro Glu

5 1 1 5 1 10 1 15

aca act gat ctc tac tgt tat

Thr Thr Asp Leu Tyr Cys Tyr

20

69

10

<210> 14

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15 <213> Artificial sequence

<223> Description of the artificial sequence: fragment

description of the artificial sequence: fragments
of the sequence coding for E7 of HPV and corresponding
peptide sequence

20 <400> 14

Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln Pro Glu

1	5	10	15
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Thr Thr Asp Leu Tyr Cys Tyr

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25

<210> 15

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<223> Description of the artificial sequence: fragment

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40 <222> (1) . . (51)

<400> 15

caa gca gaa ccg qac aqa gcc cat tac aat att gta acc ttt tgt tgc 48

Gln Ala Glu Pro Asp Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys

45	1	5	10	15
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aaq

Lys

51

50

<210> 16

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<212> PRT

<213> Artificial sequence

<223> Description of the artificial sequence: fragment

Description of the artificial sequence: Fragment of the sequence coding for E7 of HPV and corresponding peptide sequence

